

## 1<sup>st</sup> International Workshop on Secure and Privacy-Aware Information Management in e-Health

Randike Gajanayake<sup>1</sup>, Tony Sahama<sup>1</sup>, Leonie Simpson<sup>1</sup> and Bill Lane<sup>2,3</sup>

<sup>1</sup>Information Security Research Centre  
Queensland University of Technology (QUT), Brisbane, Australia

<sup>2</sup>Clayton Utz, Brisbane, Australia

<sup>3</sup>Health Law Research Centre, Faculty of Law, QUT  
{g.gajanayake, t.sahama, lr.simpson, wb.lane}@qut.edu.au

### I. TITLE

“1<sup>st</sup> International Workshop on Secure and Privacy-Aware Information Management in e-Health”

### II. SIGNIFICANCE AND TIMELINESS

Information security and privacy in the healthcare domain is a complex and challenging problem for computer scientists, social scientists, law experts and policy makers. Appropriate healthcare provision requires specialized knowledge, is information intensive and much patient information is of a particularly sensitive nature. Electronic health record systems provide opportunities for information sharing which may enhance healthcare services, for both individuals and populations. However, appropriate information management measures are essential for privacy preservation.

Traditional access control measures for privacy preservation may not match the eHealth record system scenario, where the roles of all stakeholders are less defined. Questions regarding data ownership and information management obligations for major stakeholders (healthcare professionals, patients, administrators) arise. Healthcare professionals require ready access to as much information as possible to support informed decision making. However, patients may want to exercise control over the entities gaining access to their personal health information, with particular concerns for information privacy. Balancing these competing concerns is a major challenge in the implementation of successful e-Health systems. This is not just a technological challenge, but a multidisciplinary problem with technological, social, legal and health policy aspects.

This workshop will focus on this major challenge in terms of these four main areas. We seek papers addressing the technological, socio-technical, legal and policy aspects related to information security and privacy issues in e-Health systems.

The topics of interest include but are not limited to:

- access control
- usage control
- information usage policy representation, enforcement and management
- rights management
- misuse detection
- provenance tracking
- accountability
- audit logs
- consumer acceptance of e-Health
- legal aspects relating to all aspects of information security and privacy in e-Health
- role of Big Data in information security and privacy
- usable security and privacy
- usability

### III. PLANNED FORMAT FOR THE FULL-DAY WORKSHOP WITH EXPECTED PAPER SUBMISSION VOLUME

Intended participants for this workshop include a broad range of eHealth researchers with fields of expertise including information management, privacy, eHealth policy and security technology.

Workshop paper submissions should be in IEEE conference format and a maximum of 5 pages long. All submitted papers will be peer reviewed. A total of 15 papers will be accepted. All published workshop papers will be included in the IEEE HealthCom 2014 Proceedings and will be included on IEEE Xplore.

For each accepted paper, at least one author must register and present the paper at the workshop. Speakers will be allocated a maximum of 20 minutes for an oral presentation and short question and answer session. The expected presentation style must be suitable and open for a panel discussion at the end of the presentations, which will include invited domain experts and participants. Papers that are not presented will not be included in the workshop proceedings or included in IEEE Xplore.

### IV. FULL CONTACT AND A SHORT BIO OF THE WORKSHOP ORGANIZERS

**Dr. Randike Gajanayake (BSc (Hons), PhD)** [g.gajanayake@qut.edu.au](mailto:g.gajanayake@qut.edu.au)

Randike is a Postdoctoral Research Fellow at the Queensland University of Technology (QUT) in Brisbane, Australia. His research focuses on the intervention of human factors and technology in information security and privacy in eHealth. He has specific research interests and experience in several areas of eHealth including information privacy, technology acceptance, consumer behavior, meaningful use and law.

**Dr. Tony Sahama (BSc, MPhil, PhD, MEd (HE))** [t.sahama@qut.edu.au](mailto:t.sahama@qut.edu.au)

Tony Sahama is a senior lecturer in the Information Security Discipline, Faculty of Science and Engineering. His research interests are in Health/Medical Informatics in particular, Healthcare Information Technology (HIT) and Clinical Decision Support Systems design and development. Tony has experience working with researchers in developing customized technological applications for Clinical Decision Support Systems, Data warehousing, Data Integration and IT applications for healthcare decision making processes. Tony holds professional membership with ACM (SIGBioinformatics), IEEE, IBS, ACS, SSAI and HISA. <http://staff.qut.edu.au/staff/sahama/>

**Dr. Leonie Simpson (DipTeach, BA, BAppSci (Hons), PhD)** [lr.simpson@qut.edu.au](mailto:lr.simpson@qut.edu.au)

Leonie Simpson is a senior lecturer in the Faculty of Science and Engineering and a member of the Information Security research Centre at Queensland University of Technology. Her research interests are in information security and cryptography. Leonie is a member of the IACR.

**Prof. William B Lane (LLB (Syd), LLM (Melb))** [wb.lane@qut.edu.au](mailto:w.b.lane@qut.edu.au)

Professor Lane is the Clayton Utz Professor of Public Law at QUT. He has led major research projects in the field of information privacy law and security, including the legal implications of virtual information sharing networks, the development of data breach notification regimes and the legal regulation of shared electronic health records systems. He has advised governments on information management issues relating to the public

disclosure of health data and has been an appointee of government regulatory bodies in the field of public health.

V. A TENTATIVE LIST OF TCP MEMBERS

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|---------------------------------|---------------------------------|
| 1) <i>Prof. Renato Iannella</i> | 6) <i>Prof. Alex Kuo</i>        |
| 2) <i>Prof. Joel Rodrigues</i>  | 7) <i>Prof. Andre Kushniruk</i> |
| 3) <i>Dr. Lynda Andrews</i>     | 8) <i>Dr. Mark Branagan</i>     |
| 4) <i>Prof. Ricardo Correia</i> | 9) <i>Dr. Leonie Simpson</i>    |
| 5) <i>Prof. Chi-Ren Shyu</i>    | 10) <i>Dr. Tony Sahama</i>      |

VI. A DRAFT FOR CALL FOR PAPERS

This information is attached separately.

VII. ADVERTISEMENT PLAN FOR THE CALL FOR PAPERS

In the first instance, the digital networks of the workshop organizers will be used for attracting prospective participants. For example, local and overseas University networks, e-mail links, LinkedIn, Yammer and other IEEE conference links. The call for papers will be emailed to HealthCom2013 participants and distributed to IEEEComSoc eHealth technical committee members and their colleagues. The workshop will also host its own website.